

CLAIMS

1. A measuring arrangement, in particular for spectroscopic measurements on particulate or liquid samples, comprising:
  - a measuring cuvette (10) for accommodating the sample, having at least one window (11) through which the sample (3) can be exposed to radiation, and
  - a rotating mount (20) with which the measuring cuvette (10) can be rotated about a predetermined axis of rotation (1), characterized in that the alignment of the axis of rotation (1) deviates from a vertical reference direction.
2. The measuring arrangement according to Claim 1, wherein the axis of rotation (1) is aligned horizontally.
3. The measuring arrangement according to Claim 1 or 2, wherein the measuring cuvette (10) has a coupling device which cooperates with a driving device of the rotating mount (20).
4. The measuring arrangement according to Claim 3, wherein the coupling device has a coupling surface (18) or a groove for a belt drive.
5. The measuring arrangement according to one of the preceding claims, wherein the measuring cuvette (10) is composed of two shells (12, 13) which are held together by a ring frame (14).
6. The measuring arrangement according to Claim 5, wherein the two shells (12, 13) have different volumes.

7. The measuring arrangement according to one of the preceding claims, wherein the measuring cuvette (10) contains mechanical mixing elements (19).
8. The measuring arrangement according to one of the preceding claims, wherein the measuring cuvette (10) has an opening for sample charging and removal.
9. A measuring device, in particular for spectroscopic measurements on particulate samples, comprising a measuring arrangement according to one of the preceding claims and a spectrometer (30).
10. The measuring device according to Claim 9 having an actuator unit (40) with which the measuring cuvette (10) can be moved from a loading position into a calibration position or measurement position.
11. A method for spectroscopic measurement on a particulate or liquid sample arranged in a measuring cuvette (10) which can be rotated with a rotating mount (20), whereby at least two spectroscopic measurements are performed, and between the measurements, the measuring cuvette (10) is rotated about an axis of rotation (1) which deviates from a vertical reference direction.
12. The method according to Claim 11, wherein the measuring cuvette (10) is rotated about a horizontal axis of rotation (1) between two measurements.
13. A use of a measuring arrangement, a measuring device or a method according to one of the preceding claims for spectroscopic analysis of particulate, free-flowing or suspended or liquid samples, in particular agricultural products such as cereal grain or suspensions.